

Application No. 10/756,091  
Amendment dated October 4, 2005  
Reply to Office Action of May 4, 2005

### **REMARKS/ARGUMENTS**

Responsive to the Official Action mailed May 4, 2005, applicants have amended the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, independent claim 1 and 4 have been amended, and dependent claim 2 canceled. Reconsideration is respectfully requested.

As discussed in the Specification, the present invention contemplates a novel method for production of imaged film materials, which imaging may be provided in the form of hydraulic, three-dimensional imaging. Notably, the present invention contemplates that preservation of the formed imaged is promoted by drying the imaged construct, subsequent to hydraulic imaging, by the use of electro-magnetic radiation, preferably microwave radiation.

Notably, a study of the cited prior art shows no teaching or suggestion of effecting electro-magnetic radiation drying of a hydraulically imaged film construct.

In the Action, the Examiner has rejected the pending claims under 35 U.S.C. §103, with reliance upon U.S. Patent No. 4,695,422, to Curro et al., in view of U.S. Patent No. 5,990,377, to Chen et al., and further in view of U.S. Patent No. 6,228,462, to Lee et al. However, a careful study of these references shows that, even when combined, these references clearly fail to teach or suggest applicants' novel process as claimed, and accordingly, the Examiner's rejections are respectfully traversed.

As specifically acknowledged by the Examiner in the Action, Curro et al. is "silent to the drying process comprising the use of a frequency range of electro-magnetic radiation that preserves said image imparted into said film". Thus, the Examiner has acknowledged that the principal Curro reference fails to teach or suggest applicants' novel method.

Additionally, it is noted that the Curro et al. patent fails to teach or suggest use of a *three-dimensional image transfer device*, as specifically set forth in claim 1. This type of image transfer device, such as disclosed in U.S. Patent No. 5,098,764, to Drelich et al., cited by applicants, can be configured to exhibit a wide variety of different three-dimensional images, unlike the simple perforated drum to which the teachings of Curro et al. are limited. Additionally, it is noted that the principal Curro et al. reference fails to teach or suggest formation of a *film laminate*, as claimed, much less any teaching of imaging such a laminate, and thereafter preserving the imaging by drying the hydraulically-imaged laminate with electromagnetic radiation.

Because the principal Curro et al. reference fails to teach or suggest applicants' novel method, it is respectfully maintained that the teachings of the secondary Chen et al. patent must be carefully studied to determine if they overcome the clear deficiencies in the teachings of the principal Curro et al. reference in teaching or suggesting applicants' claimed method. In this regard, applicants must respectfully maintain that Chen et al. clearly fails to overcome the deficiencies in the teachings of the principal Curro et al. patent.

Significantly, there is *no teaching or suggestion* in the secondary Chen et al. reference of employing electro-magnetic radiation for drying a hydraulically imaged film or film laminate.

In the Action, the Examiner has referenced discussion in Chen et al. for guarding "non-compressive drying". However, as a careful study of this reference shows, there is no teaching or suggestion of employing such drying in connection with manufacture of hydraulically-imaged films or film laminates.

At column 13, line 29 *et seq.*, Chen et al. states:

"Noncompressive drying" refers to drying methods for drying *cellulosic webs* that do not involve compressive nips or other

steps causing significant densification or compression of a portion of the web during the drying process. . . . It is believed that the three-dimensional base sheets of the present invention could be dried with any of the above-mentioned non-compressive drying means without causing significant webbed densification. . . . (emphasis supplied).

As will be recognized by those skilled in the art, Chen et al. is limited in its teachings to a contoured, inherently hydrophillic base sheet, *preferably a resilient cellulosic tissue sheet* (column 27, lines 10-12).

At column 28, lines 16 *et seq.*, Chen et al. discusses formation of the base sheet:

The inherently hydrophillic base sheet can be produced by a wide variety of methods. Preferably, the base sheet, prior to calendering that may be desired, is characterized by a low-density, three-dimensional structure created in substantial part before the sheet reaches a solids level (dryness level) of about 60% or higher and preferably about 70% or higher. Suitable low-density, three-dimensional structures can be achieved by a variety of means known in the arts of *papermaking, tissue production, and nonwoven web production* . . . (emphasis supplied).

Clearly, those skilled in the art will recognize that the contoured base sheet of Chen et al., for which "non-compressive drying" is contemplated, is *a sheet formed by a papermaking process, and not a hydraulically-imaged film or film laminate*.

Thus, even when combined, the Curro et al. and Chen et al. references clearly fail to teach or suggest applicants' novel method, as claimed.

Applicants respectfully refer to M.P.E.P. Section 2143.03, which specifically requires that in order to establish a *prima facie* obviousness rejection, "all claim limitations must be taught or suggested by the prior art" (citations omitted). Because of the clear deficiencies in the teachings of the principal Curro et al. reference, and the secondary Chen et al. reference, it is respectfully maintained that the rejection under 35 U.S.C. §103 should be withdrawn.

Application No. 10/756,091  
Amendment dated October 4, 2005  
Reply to Office Action of May 4, 2005



Applicants note the Examiner's further reliance upon the Lee et al. patent, but it is respectfully submitted that this reference clearly fails to overcome the deficiencies in the teachings of the Curro et al. and Chen et al. patents. Again, there is clearly no teaching or suggestion in Lee et al. of employing electro-magnetic radiation for drying a hydraulically imaged film or film laminate, thereby desirably preserving the image imparted to the film or film laminate.

In view of the foregoing, formal allowance of claims 1, 3, and 4 is believed to be in order and is respectfully requested. Should the Examiner wish to speak with applicants' attorneys, they may be reached at the number indicated below.

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

By   
Stephen D. Geimer, Reg. No. 28,846

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
500 West Madison Street, Suite 3800  
Chicago, Illinois 60661-2511  
312/876-1800

CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage at First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **October 4, 2005**.

